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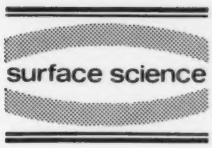

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R. Harder, A. Nesbitt, J.-H. Rechtien, W. Mix, C. Röthig, M. Kato and K.J. Snowdon, Evidence for hot electron induced angular straggling of Ne beams scattered from Cu(111) 289 (1993) 214

Iron oxide

J. Prasad, E. Murray and J.A. Kelber, Site selective chemistry of S, Cl and H_2O at the iron oxide surface 289 (1993) 10

Low energy electron diffraction

T.M. Jung, R. Kaplan and S.M. Prokes, Ga on Si(112): growth and energetics of thermal desorption 289 (1993) L577

D.K. Flynn-Sanders, J.W. Evans and P.A. Thiel, Homoepitaxial growth on Pd(100) 289 (1993) 75

C. Wigren, J.N. Andersen, R. Nyholm and U.O. Karlsson, Epitaxial silicide formation in the Mg/Si(111) system 289 (1993) 290

J.N. Andersen, E. Lundgren, R. Nyholm and M. Qvarford, Alkali metal adsorption on Al(111) 289 (1993) 307

V. Fritzsche, J.B. Pendry, U. Löffler, H. Wedler, M.A. Mendez and K. Heinz, Surface dipole moments from LEED investigations 289 (1993) 389

Luminescence

D.G. Li, N.S. McAlpine and D. Haneman, Precision determination of long-wavelength cleavage luminescence energy and derivation of minimum surface state gap on clean cleaved Si surfaces 289 (1993) L609

J. Xu, L. Hudson, R. Albridge, A. Barnes and N. Tolk, Hydrogen exposure-enhanced CN* emission from alkali-halide surfaces 289 (1993) L622

Magnetic structures

B. Weimert, J. Noffke and L. Fritsche, Electronic and magnetic properties of a Co-monolayer on a W(110) substrate 289 (1993) 397

Metals

A.M. Rodríguez, G. Bozzolo and J. Ferrante, Multilayer relaxation and surface energies of fcc and bcc metals using equivalent crystal theory 289 (1993) 100

E. Shustorovich and A.T. Bell, Decomposition and reduction of NO on transition metal surfaces: bond order conservation Morse potential analysis 289 (1993) 127

Methane

H. Yang and J.L. Whitten, Reaction of CH_4 with substitutional Fe/Ni(111) 289 (1993) 30

Mica
H.-G. Busmann, R. Hiss, H. Gaber and I.V. Hertel, Growth mechanisms of C_{60}-molecular beam epitaxy on mica 289 (1993) 381

Molecular beam epitaxy
H.-G. Busmann, R. Hiss, H. Gaber and I.V. Hertel, Growth mechanisms of C_{60}-molecular beam epitaxy on mica 289 (1993) 381

Molybdenum
Han Xu, P. Uvdal, C.M. Friend and J. Stöhr, The adsorption structure of 2,5-dihydrothiophene on Mo(110)-(4 × 1)-S: ring orientation as determined by NEXAFS 289 (1993) L599

Nickel
L.S. Caputi, R.G. Agostino, A. Amoddeo, S. Molinaro, G. Chiarello, E. Colavita and A. Santaniello, Orientational study of low coverage CO and NO on Ni(111) 289 (1993) L591
G. Gross and K.H. Rieder, Revisiting the iterative procedure for atomic beam diffraction analyses: improvements, caveats and first application to a 2D adsorption structure 289 (1993) 180
C. Massobrio, Comment on 'Structure and diffusion on clusters on Ni surfaces by C.-L. Liu and J.B. Adams' 289 (1993) L638
C.-L. Liu and J.B. Adams, Reply to "Comment on 'Structure and diffusion of clusters on Ni surfaces' by C. Massobrio" 289 (1993) L641
R. Lamber and N.I. Jaeger, Electron microscopy study of the interaction of Ni, Pd and Pt with carbon. III. Formation of a substitutional Pt–C carbide in ultrafine platinum particles 289 (1993) 247
S. Tjandra and F. Zaera, The thermal chemistry of ethyl iodide chemisorbed on Ni(100) 289 (1993) 255
H.E. Dastoor, P. Gardner and D.A. King, The coadsorption of ammonia and oxygen on Ni{110}: a RAIRS study 289 (1993) 279

Nitric oxide
L.S. Caputi, R.G. Agostino, A. Amoddeo, S. Molinaro, G. Chiarello, E. Colavita and A. Santaniello, Orientational study of low coverage CO and NO on Ni(111) 289 (1993) L591
T.R. Ward, R. Hoffmann and M. Shelef, Coupling nitrosyls as the first step in the reduction of NO on metal surfaces: the special role of rhodium 289 (1993) 85
E. Shustorovich and A.T. Bell, Decomposition and reduction of NO on transition metal surfaces: bond order conservation Morse potential analysis 289 (1993) 127
A. Gross and W. Brenig, Vibrational excitation of NO in NO/Ag scattering revisited 289 (1993) 335

Nitrogen
H. Niehus and C. Achete, Surface structure investigation of nitrogen and oxygen on $Cu_3Au(100)$ 289 (1993) 19

Organic substances
Han Xu, P. Uvdal, C.M. Friend and J. Stöhr, The adsorption structure of 2,5-dihydrothiophene on Mo(110)-(4 × 1)-S: ring orientation as determined by NEXAFS 289 (1993) L599
R.D. Ramsier and J.T. Yates, Jr., Thermal and electron-induced behavior of d_6-benzene-chromium-tricarbonyl adsorbed on Ag(111) 289 (1993) 39

R. Raval, S.F. Parker and M.A. Chesters, C–H···M interactions and orientational changes of cyclohexane on Cu(111): a RAIRS, EELS and LEED study 289 (1993) 227
D.P. Land, W. Erley and H. Ibach, HREELS investigation of the orientation and dehydrogenation of cyclohexane on Pt[111] 289 (1993) 237
S. Tjandra and F. Zaera, The thermal chemistry of ethyl iodide chemisorbed on Ni(100) 289 (1993) 255

Oxygen
R. Zhang, A. Ludviksson and C.T. Campbell, The chemisorption of H_2O and O_2 on Cu films on ZnO(0001)-O 289 (1993) 1
H. Niehus and C. Achete, Surface structure investigation of nitrogen and oxygen on $Cu_3Au(100)$ 289 (1993) 19
H.E. Dastoor, P. Gardner and D.A. King, The coadsorption of ammonia and oxygen on Ni{110}: a RAIRS study 289 (1993) 279

Palladium
D.K. Flynn-Sanders, J.W. Evans and P.A. Thiel, Homoepitaxial growth on Pd(100) 289 (1993) 75
T.R. Ward, R. Hoffmann and M. Shelef, Coupling nitrosyls as the first step in the reduction of NO on metal surfaces: the special role of rhodium 289 (1993) 85
R. Lamber and N.I. Jaeger, Electron microscopy study of the interaction of Ni, Pd and Pt with carbon. III. Formation of a substitutional Pt–C carbide in ultrafine platinum particles 289 (1993) 247
Y.-W. Yang, J.C. Lin and T. Engel, Desorption kinetics of CO from epitaxial Pd films on W(110) in the low coverage limit 289 (1993) 267

Photoelectron spectroscopy
J.A. Rodriguez, The chemical properties of bimetallic surfaces: bonding between CO and Zn on Ru(001) 289 (1993) L584
L.S. Caputi, R.G. Agostino, A. Amoddeo, S. Molinaro, G. Chiarello, E. Colavita and A. Santaniello, Orientational study of low coverage CO and NO on Ni(111) 289 (1993) L591
J. Prasad, E. Murray and J.A. Kelber, Site selective chemistry of S, Cl and H_2O at the iron oxide surface 289 (1993) 10
S. Tjandra and F. Zaera, The thermal chemistry of ethyl iodide chemisorbed on Ni(100) 289 (1993) 255
C. Wigren, J.N. Andersen, R. Nyholm and U.O. Karlsson, Epitaxial silicide formation in the Mg/Si(111) system 289 (1993) 290
L.S. Dake and R.J. Lad, Electronic and chemical interactions at aluminum/TiO_2(110) interfaces 289 (1993) 297
J.N. Andersen, E. Lundgren, R. Nyholm and M. Qvarford, Alkali metal adsorption on Al(111) 289 (1993) 307

Platinum
T.R. Ward, R. Hoffmann and M. Shelef, Coupling nitrosyls as the first step in the reduction of NO on metal surfaces: the special role of rhodium 289 (1993) 85
J.M. Feliu, R. Gómez, M.J. Llorca and A. Aldaz, Electrochemical behavior of irreversibly adsorbed selenium dosed from solution on Pt(*h,k,l*) single crystal electrodes in sulphuric and perchloric acid media 289 (1993) 152
D.P. Land, W. Erley and H. Ibach, HREELS investigation of the orientation and dehydrogenation of cyclohexane on Pt[111] 289 (1993) 237
R. Lamber and N.I. Jaeger, Electron microscopy study of the interaction of Ni, Pd and Pt with carbon. III. Formation of a substitutional Pt–C carbide in ultrafine platinum particles 289 (1993) 247

Rhodium
T.R. Ward, R. Hoffmann and M. Shelef, Coupling nitrosyls as the first step in the reduction of NO on metal surfaces: the special role of rhodium 289 (1993) 85

Secondary ion mass spectroscopy
S. Tjandra and F. Zaera, The thermal chemistry of ethyl iodide chemisorbed on Ni(100) 289 (1993) 255

Selenium
J.M. Feliu, R. Gómez, M.J. Llorca and A. Aldaz, Electrochemical behavior of irreversibly adsorbed selenium dosed from solution on Pt(h,k,l) single crystal electrodes in sulphuric and perchloric acid media 289 (1993) 152

Silicides
C. Wigren, J.N. Andersen, R. Nyholm and U.O. Karlsson, Epitaxial silicide formation in the Mg/Si(111) system 289 (1993) 290

Silicon
T.M. Jung, R. Kaplan and S.M. Prokes, Ga on Si(112): growth and energetics of thermal desorption 289 (1993) L577
I. Vilfan, Unbinding of double steps on vicinal Si(001) surfaces 289 (1993) L604
D.G. Li, N.S. McAlpine and D. Haneman, Precision determination of long-wavelength cleavage luminescence energy and derivation of minimum surface state gap on clean cleaved Si surfaces 289 (1993) L609
A. Vittadini, A. Selloni and M. Casarin, Energetics of atomic hydrogen diffusion on Si(100) 289 (1993) L625
L. Spiess, P.S. Mangat, S.-P. Tang, K.M. Schirm, A.J. Freeman and P. Soukiassian, Combined theoretical and experimental determination of the atomic structure and adsorption site of Na on the Si(100)2 × 1 surface 289 (1993) L631

Silver
R.D. Ramsier and J.T. Yates, Jr., Thermal and electron-induced behavior of d_6-benzene-chromium-tricarbonyl adsorbed on Ag(111) 289 (1993) 39
R.M. Charatan and R.S. Williams, Influence of triple scattering on impact collision ion scattering spectroscopy at 135° 289 (1993) 163
A. Gross and W. Brenig, Vibrational excitation of NO in NO/Ag scattering revisited 289 (1993) 335

Solid–electrolyte interface
O.M. Magnussen, J. Wiechers and R.J. Behm, In situ scanning tunneling microscopy observations of the potential-dependent (1 × 2) reconstruction on Au(110) in acidic electrolytes 289 (1993) 139
J.M. Feliu, R. Gómez, M.J. Llorca and A. Aldaz, Electrochemical behavior of irreversibly adsorbed selenium dosed from solution on Pt(h,k,l) single crystal electrodes in sulphuric and perchloric acid media 289 (1993) 152

Sulphides
A. Schumacher, L. Scandella, N. Kruse and R. Prins, Single-layer MoS_2 on mica: studies by means of scanning force microscopy 289 (1993) L595

Sulphur
Han Xu, P. Uvdal, C.M. Friend and J. Stöhr, The adsorption structure of 2,5-dihydrothiophene on Mo(110)-(4 × 1)-S: ring orientation as determined by NEXAFS 289 (1993) L599
J. Prasad, E. Murray and J.A. Kelber, Site selective chemistry of S, Cl and H_2O at the iron oxide surface 289 (1993) 10
Y. Huang and J.M. Cowley, Structure of the sulfur-adsorbed $Cu_3Au(110)$ surface 289 (1993) 340

Surface defects
I. Vilfan, Unbinding of double steps on vicinal Si(001) surfaces 289 (1993) L604

Surface diffusion
L.B. Hansen, P. Stoltze, K.W. Jacobsen and J.K. Nørskov, Activation free energy and entropy for the normal and exchange selfdiffusion processes on Cu(100) 289 (1993) 68
A. Vittadini, A. Selloni and M. Casarin, Energetics of atomic hydrogen diffusion on Si(100) 289 (1993) L625
C. Massobrio, Comment on 'Structure and diffusion on clusters on Ni surfaces by C.-L. Liu and J.B. Adams' 289 (1993) L638
C.-L. Liu and J.B. Adams, Reply to "Comment on 'Structure and diffusion of clusters on Ni surfaces' by C. Massobrio" 289 (1993) L641

Surface segregation
G. Bozzolo, B. Good and J. Ferrante, Heat of segregation of single substitutional impurities 289 (1993) 169
I.G. Batirev, A.N. Karavanov and J.A. Leiro, Surface segregation and catalytic properties of Pd–Ru alloys 289 (1993) 357

Surface structure, see also Low energy electron diffraction
A. Antonelli, S.N. Khanna and P. Jena, Interplanar relaxation at the (0001) surface of Be 289 (1993) L614
A.M. Rodríguez, G. Bozzolo and J. Ferrante, Multilayer relaxation and surface energies of fcc and bcc metals using equivalent crystal theory 289 (1993) 100
O.M. Magnussen, J. Wiechers and R.J. Behm, In situ scanning tunneling microscopy observations of the potential-dependent (1 × 2) reconstruction on Au(110) in acidic electrolytes 289 (1993) 139
Y. Huang and J.M. Cowley, Structure of the sulfur-adsorbed $Cu_3Au(110)$ surface 289 (1993) 340

Surface tension
A.M. Rodríguez, G. Bozzolo and J. Ferrante, Multilayer relaxation and surface energies of fcc and bcc metals using equivalent crystal theory 289 (1993) 100

Surface thermodynamics
J.-P. Bucher, H. Roeder and K. Kern, Thermally induced disorder and conformational defects of alkane monolayers on graphite 289 (1993) 370

Thermal desorption
J.A. Rodriguez, The chemical properties of bimetallic surfaces: bonding between CO and Zn on Ru(001) 289 (1993) L584
R. Zhang, A. Ludviksson and C.T. Campbell, The chemisorption of H_2O and O_2 on Cu films on ZnO(0001)-O 289 (1993) 1

R.D. Ramsier and J.T. Yates, Jr., Thermal and electron-induced behavior of d_6-benzene-chromium-tricarbonyl adsorbed on Ag(111) 289 (1993) 39
S. Tjandra and F. Zaera, The thermal chemistry of ethyl iodide chemisorbed on Ni(100) 289 (1993) 255

Titanium oxide
L.S. Dake and R.J. Lad, Electronic and chemical interactions at aluminum/TiO_2(110) interfaces 289 (1993) 297

Tungsten
Y.-W. Yang, J.C. Lin and T. Engel, Desorption kinetics of CO from epitaxial Pd films on W(110) in the low coverage limit 289 (1993) 267
B. Weimert, J. Noffke and L. Fritsche, Electronic and magnetic properties of a Co-monolayer on a W(110) substrate 289 (1993) 397

Tunneling
H. Niehus and C. Achete, Surface structure investigation of nitrogen and oxygen on Cu_3Au(100) 289 (1993) 19
O.M. Magnussen, J. Wiechers and R.J. Behm, In situ scanning tunneling microscopy observations of the potential-dependent (1×2) reconstruction on Au(110) in acidic electrolytes 289 (1993) 139
R. Laiho and H.J. Reittu, Theory of scanning tunneling microscopy with spin-polarized electrons obtained from a semiconducting tip 289 (1993) 363
J.-P. Bucher, H. Roeder and K. Kern, Thermally induced disorder and conformational defects of alkane monolayers on graphite 289 (1993) 370

Water
R. Zhang, A. Ludviksson and C.T. Campbell, The chemisorption of H_2O and O_2 on Cu films on ZnO(0001)-O 289 (1993) 1
J. Prasad, E. Murray and J.A. Kelber, Site selective chemistry of S, Cl and H_2O at the iron oxide surface 289 (1993) 10

X-ray absorption
Han Xu, P. Uvdal, C.M. Friend and J. Stöhr, The adsorption structure of 2,5-dihydrothiophene on Mo(110)-(4×1)-S: ring orientation as determined by NEXAFS 289 (1993) L599
L. Spiess, P.S. Mangat, S.-P. Tang, K.M. Schirm, A.J. Freeman and P. Soukiassian, Combined theoretical and experimental determination of the atomic structure and adsorption site of Na on the Si(100)2×1 surface 289 (1993) L631

Zinc oxide
R. Zhang, A. Ludviksson and C.T. Campbell, The chemisorption of H_2O and O_2 on Cu films on ZnO(0001)-O 289 (1993) 1